

Teaching Sequence

We use a consistent approach in the planning and teaching of maths at Regents Park Community Primary School from EYFS to Year 6.

As a school we follow the **Bright Pi Scheme of work**, which sets out the termly objectives we need to teach and provides teachers with strategies and ideas to use. The scheme ensures **continuity and progression** in the teaching of maths and is adapted according to the needs of our children.

Teachers have the flexibility to decide how long they need to spend on each topic or unit of work and adapt their planning to ensure personalised learning to address individual needs and requirements for their class.

Maths Mastery/ CPA Approach

We use a **mastery approach** when planning our maths curriculum. We want our children to be secure with mathematical concepts and ensure our planning reflects this.

Teachers use the **CPA** (concrete – pictorial – abstract) approach to teaching mathematics which helps children understand the structures of the four operations (addition, subtraction, multiplication and division). Concrete manipulatives are given to each class which include Numicon, Base 10, Cuisenaire rods, Place Value Counters, Double sided Counters to name a few. Multiple representations are encouraged through the use of part-whole models, bar modelling and tens frames etc.

EYFS

In EYFS, developing a **secure understanding** in **number** is essential so that all children excel mathematically. It is important that children are able to count confidently, develop a deep understanding of numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding – such as using manipulatives, for organising counting, children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. (Development Matters, 2021).

This is why we use the **White Rose Maths** planning and resources for our youngest learners. Teachers use this planning to provide learning during adult-led learning and continuous provision

Fluency Bee and 99 Club

At Regents Park School we want our children to become fluent in their number facts. From Year 1 – Y4, children use the **Fluency Bee Programme** which is designed to develop confidence with numbers through varied and frequent practice. It helps to **build number sense and develop a range of core skills in maths**. We believe being fluent is more than just knowing ‘how’ to do something; it is about understanding ‘why’. When a child is fluent, they can apply their understanding to a range of contexts and are able to select the most efficient method for the task at hand.

Children in **KS1 and 2** also take part in our **99 Club**, which is designed to improve their mental arithmetic skills. Children are encouraged to solve a set of number calculations within a time limit; it promotes speed, accuracy and confidence in math.

Vocabulary

We ensure the children at Regents Park are taught the **correct mathematical vocabulary and terminology**. All year groups have a list of key words that the children are taught in each topic and these are also displayed in class. Children are expected to use the correct vocabulary when explaining **their mathematical reasoning**. We also provide children with **sentences stems** to help support their verbal and written mathematical understanding.

Maths in a nutshell at Regents Park



Maths across the curriculum

We value the importance of mathematics in other subjects and encourage children to use their mathematical skills and knowledge when tackling tasks in other subjects.

We encourage links to be made to other subjects such as **Design Technology, Computing, Science and PE**.

Times Table Rock Stars

Children in Years 2-6, use **Times Tables Rockstars** to improve their multiplication and division skills through fun, game-based learning. TTRs builds **speed and accuracy with regular practice and immediate feedback**. The competitive element motivates children and makes learning fun, while progress tracking allows the teachers to identify and support areas needing improvement. We want our children to become **confident** with their times tables; TTR is a proven way of doing this.

Children in Year 1 are encouraged to use **NumberBots**, which helps support acquisition of basic numbers facts involving the four mathematical operations.

Children can access these platforms at home and at school.

Intervention

We aim to make sure that all children have a deep understanding of the mathematics they are learning. However, at the same time we do acknowledge that some children will need **further intervention** in order to develop their mathematical understanding. Where there are deemed to be gaps in children's understanding, the Bright Pi progression sheets show related skills from earlier year groups which are built into teachers' planning.

Those pupils with a good level of understanding and who grasp concepts rapidly are challenged through being offered rich and sophisticated problems before any acceleration through new content. Throughout school we use **targeted intervention** to support those children who need additional practice.

Written and Mental Calculations

Mental calculation strategies are taught through the **mental/oral starter** and are embedded in the main teaching of the lesson. Children are encouraged to make jottings in their mathematics book. We also teach our children written calculations so they can solve multi-step problems confidently.

Retrieval Practice

At the start of each lesson, children will complete a quick retrieval practice. Children will answer review questions from different areas of previous learning. This helps to reinforce key concepts; boost memory retention and identify gaps in understanding. We believe by regularly revisiting past topics, the children are strengthening their overall knowledge and confidence in maths.

Assessment

Teachers use assessment throughout their teaching to gauge what children have learnt and what they need further support with. End of topic or unit assessments are carried out and these are used to inform planning and teaching. We make use of the NCETM Mastery materials and Testbase for end of topic or unit assessments.

Each term, children from Year 2 to 6 undertake a summative test to demonstrate their understanding of what they have learnt so far. This is done through our Star Maths tests; in addition to this, the children will also undertake an arithmetic and reasoning test each term. Children in Y1 will take an informal test at the end each term. Using both the formative and summative assessment will determine children's progress and attainment.